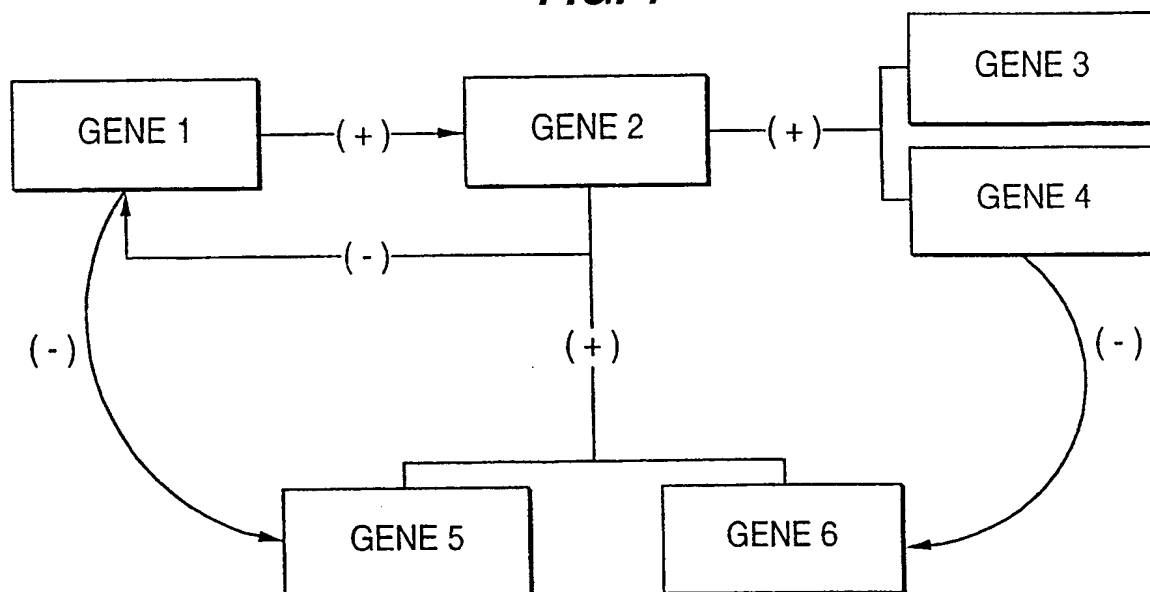
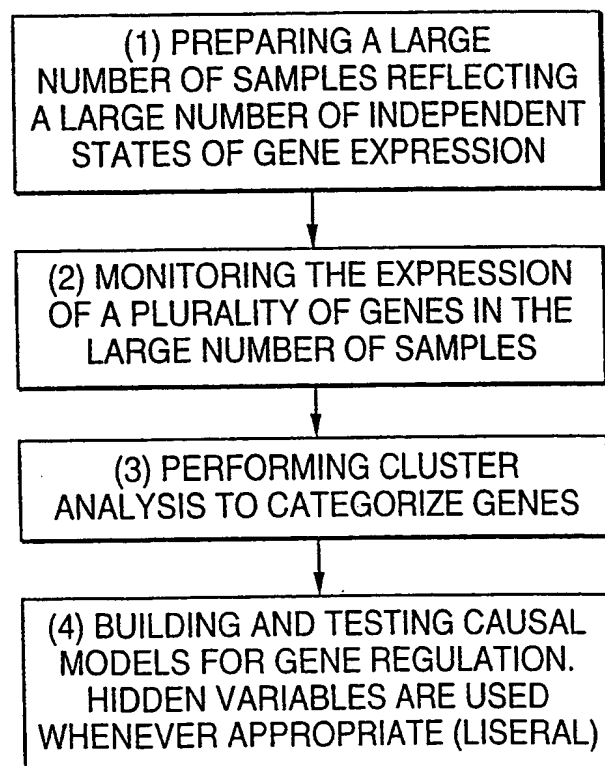
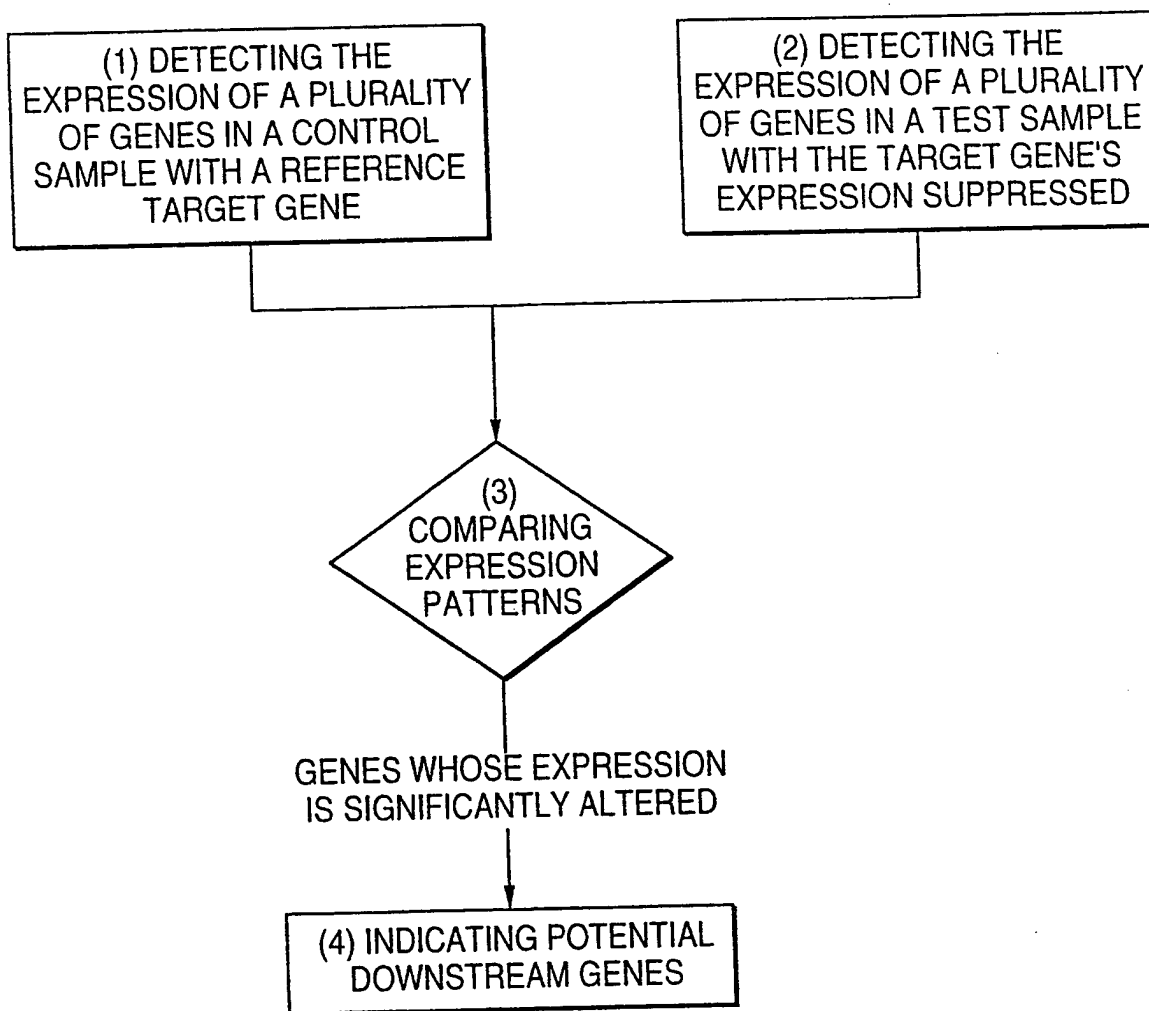


1/23

FIG. 1**FIG. 2**

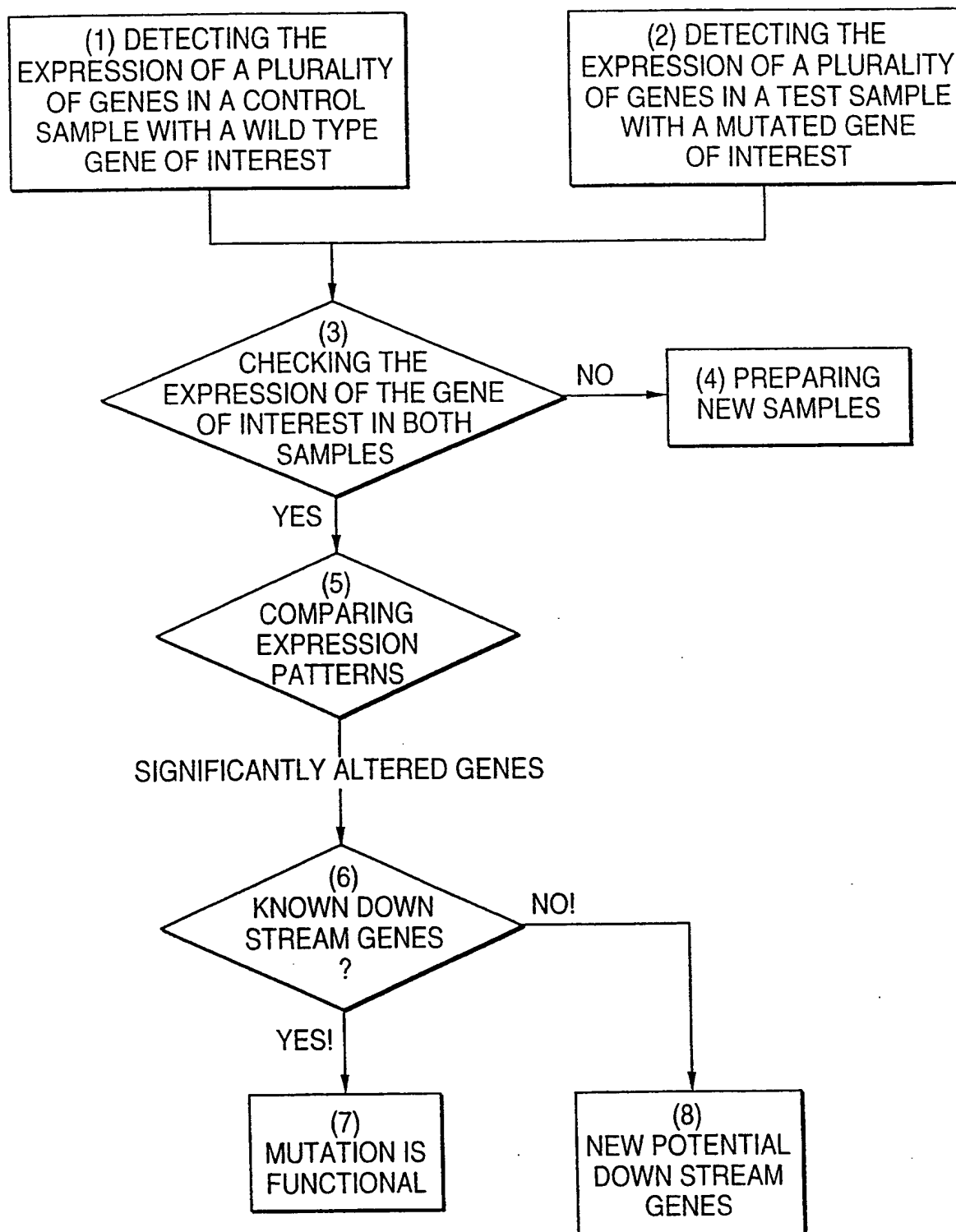
2/23

FIG. 3



3/23

FIG. 4



4/23

FIG. 5

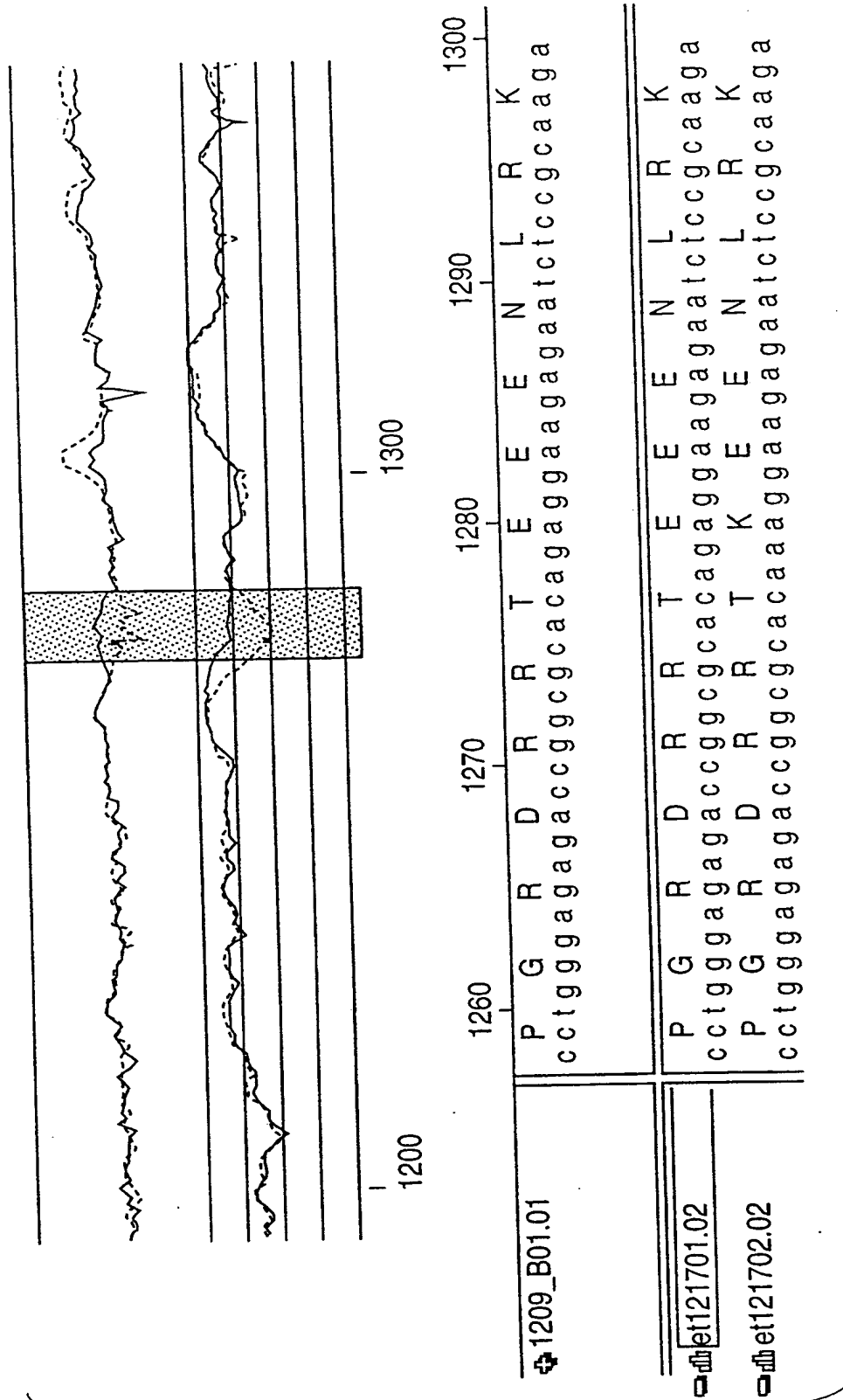
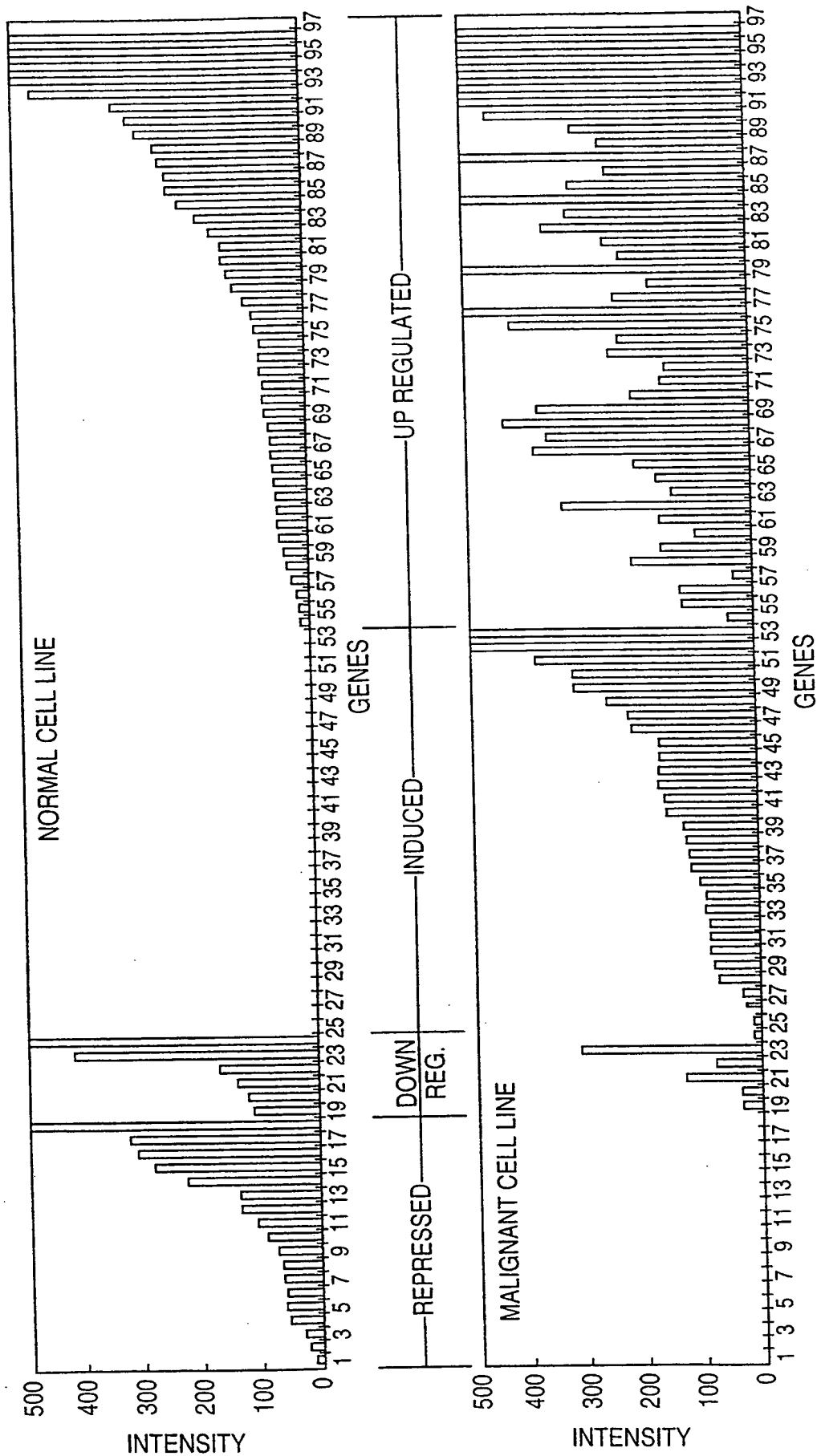


FIG. 5

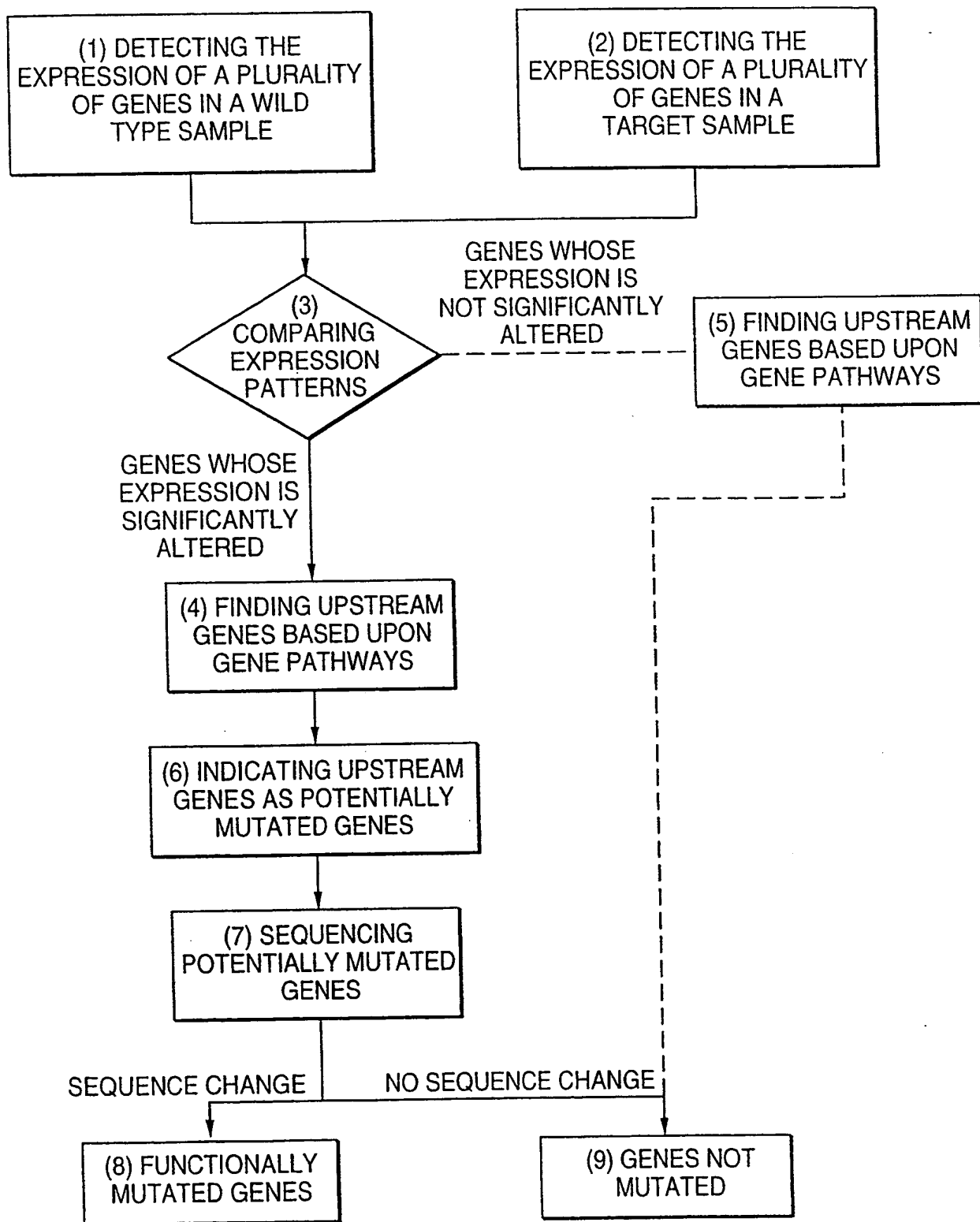
5/23

FIG. 6



6/23

FIG. 7

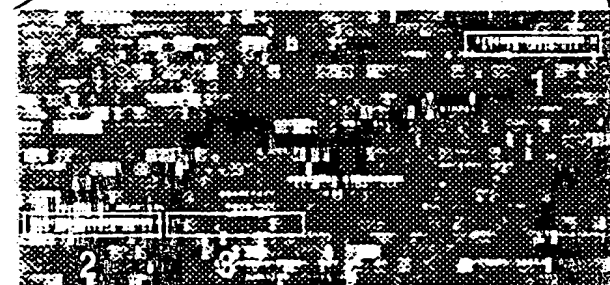
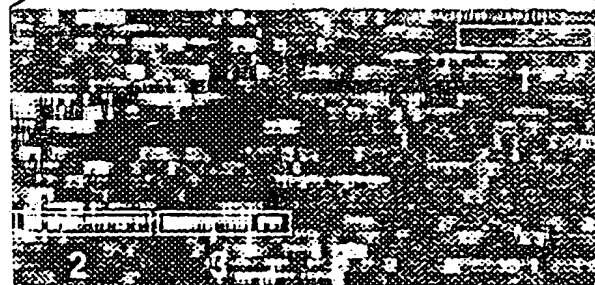
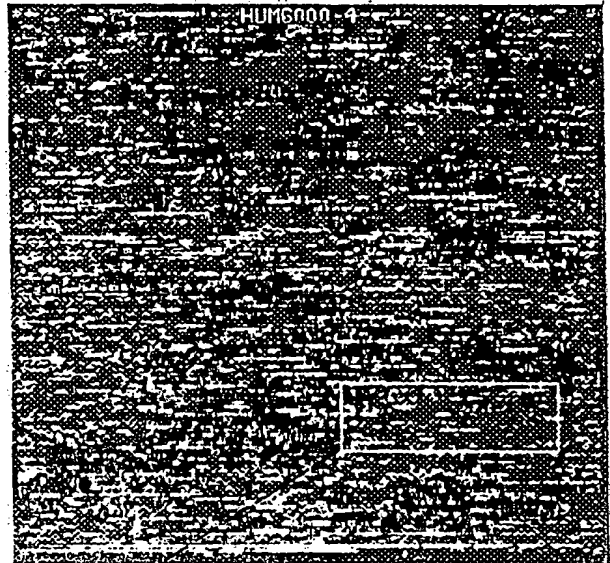
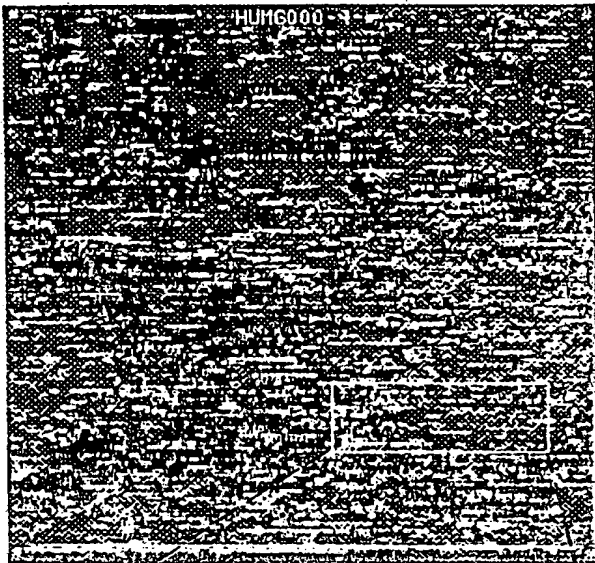


7/23

FIG. 8

HT-125

BT-474



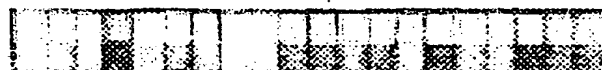
1 HT-125

BT-474



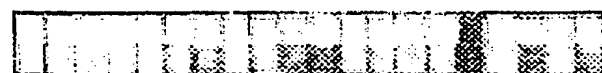
2 HER2/NEU

HER2/NEU



3 LAMININ RECEPTOR

LAMININ RECEPTOR



GALECTIN-1

GALECTIN-1

8/23

FIG. 9A

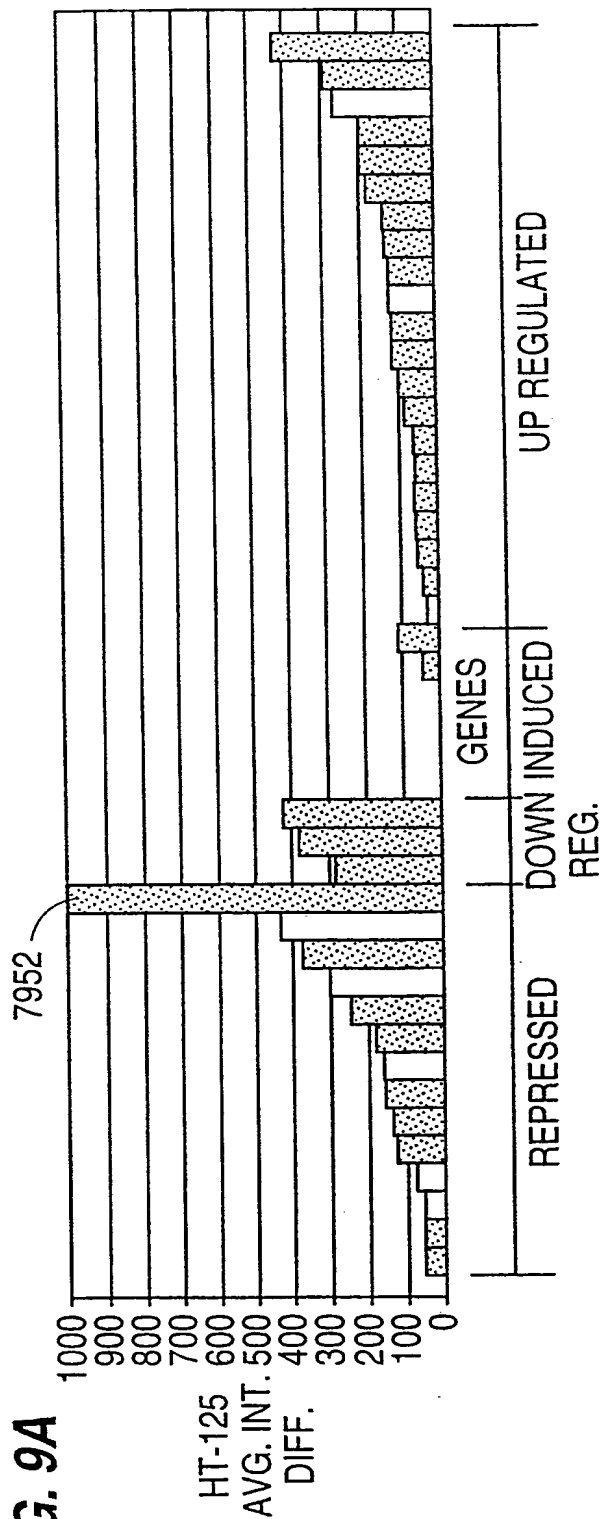
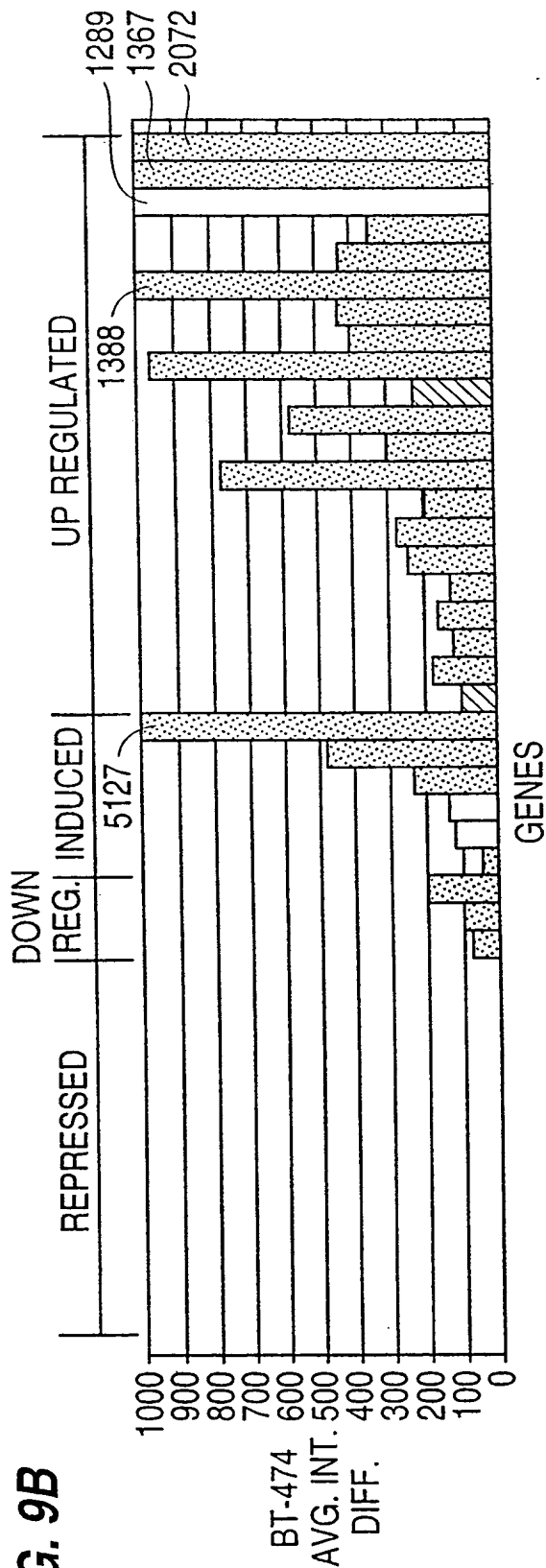
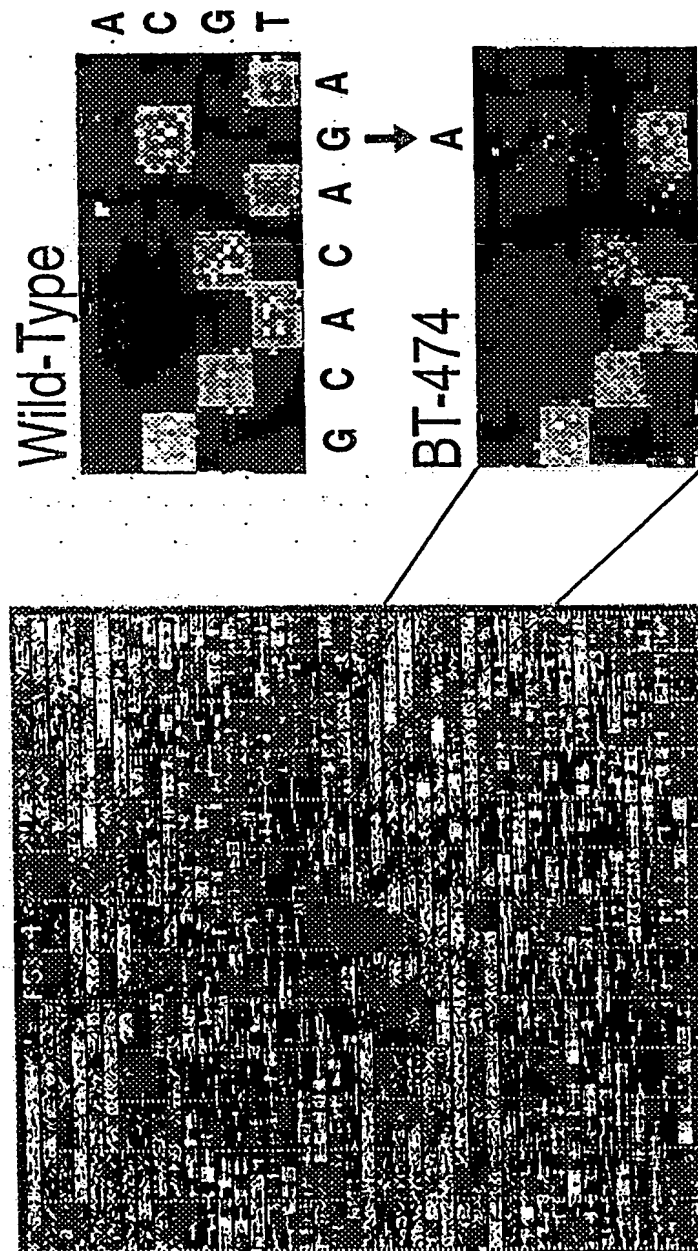


FIG. 9B



9/23

FIG. 10A



10/23

FIG. 10B

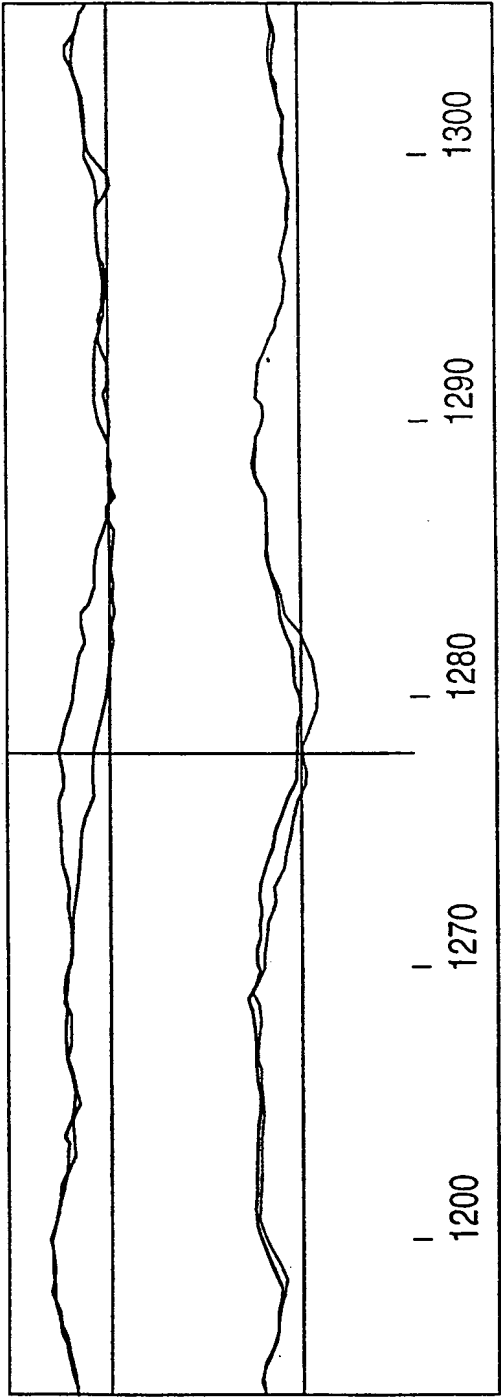


FIG. 10C

⊕ p53 ref.seq	1260 1270 1280 1290 1300 P G R D R R R T E E E N L R K cctgggagagaccggcgccacagaggagagaatctccgcaaga
⊖ wild-type.seq	P G R D R R R T E E E N L R K cctgggagagaccggcgccacagaggagagaatctccgcaaga
⊖ BT-474.seq	P G R D R R R T K E E N L R K cctgggagagaccggcgccacaaaggagagaatctccgcaaga

II/23

FIG. 11A

Table 3.

Genes transcriptionally induced in BT-474 vs HT-125

<u>Accession</u>	<u>Nominal copy number: 500~1,000 copie/cell</u>	<u>Functional category</u>
X00474	PS2 protein precursor	other
M1 1730	Her2/neu tyrosine kinase receptor	signal transduction
R1 0066	cDNA clone 128808 similar to Prohibitin	other
<u>Nominal copy number: 100-500 copies/cell</u>		
J05068	Transcobalamin I	other
M22382	Mitochondrial matrix protein P1 precursor	mitochondrial
T54303	cDNA clone 69022 similar to Keratin, type II cytoskeletal 8	structural/cytoskeletal
L33930	CD24	signal transduction
T51499	cDNA clone 71494 similar to Succinate dehydrogenase	metabolic enz.
T70062	cDNA clone 80945 similar to NF45	transcription factor
X70940	Elongation factor 1 alpha-2	translational mach.
M88279	Human immunophilin	other
D45370	Adipose specific protein	other
H52207	cDNA clone 209710 similar to Matrix GLA-protein precursor	other
L08044	Intestinal trefoil factor	secre. gr. fact.
M31627	X Box binding protein-1	transcription factor
U37519	Aldehyde dehydrogenase	metabolic enz.
U39840	Hepatocyte nuclear factor-3 alpha	transcription factor
M26481	KS1/4 antigen	other
H09351	cDNA clone 46019 similar to MCM3 homolog	DNA replication
T51961	Proliferating cell nuclear antigen	DNA replication
T59162	cDNA clone 74635 similar to Selenium-binding protein	other

TABLE 3

12/23

FIG. 11B

<u>Nominal copy number: 50-100 copin/cell</u>		
T67986	cDNA clone 82030 similar to Clusterin precursor	cell ad./cell-cell comm.
U21931	Fructose-1,6-biphosphatase	metabolic enz.
Z13009	E-cadherin	cell ad./cell-cell comm.
M18216	Nonspecific crossreacting antigen	other
U31875	Hep27 protein	other
L02547	Cleavage stim.factor	translational mach.
R89566	cDNA clone 195338 similar to lamin B receptor	other
T98835	cDNA clone 122341 similar to 80.7 KD alpha trans-inducing protein	other
R00451	cDNA clone 123283 similar to Clathrin coat assembly protein AP47	other
M34309	Human epidermal growth factor receptor, HER3	signal transduction
X73424	Propionyl-CoA carboxylase beta chain	metabolic enz.
X89985	BCL7B	other
H00645	cDNA clone 149859 similar to Ribonuclease inhibitor	other
H41017	cDNA clone 192957 similar to Creatine kinase, ubiquitous mitochondrial precursor	mitochondrial
R85558	cDNA clone 180221 similar to Inorganic pyrophosphatase	metabolic enz.
<u>Nominal copy number: 10-50 copies/cell</u>		
H41006	cDNA clone 177323 similar to Quinol oxidase polypeptide I	other
X51801	OP-1, osteogenic protein	secr. gr. fact.
M69238	Aryl hydrocarbon receptor nuclear translocator	transcription factor
X69392	Ribosomal protein L26.	translational mach.

13/23

FIG. 11C

R88418	cDNA clone 166353 similar to Cleavage stimulation factor, 50 KD subunit	translational mach.
Y00815	Leukocyte antigen related protein	cell ad./cell-cell comm.
H41406	cDNA clone 192943 similar to mouse Gamma-adaptin	protein process.
X92814	HREV107-like protein.	other
X68194	h-Sp1	other
R42070	cDNA clone 30646 similar to Verprolin	structural/cytoskeletal
H19467	cDNA clone 172249 similar to Ankyrin R	other
R10620	cDNA clone 128901 similar to Tyrosine-protein kinase CSK	signal transduction
L29254	L-iditol-2 dehydrogenase gene	metabolic enz.
M34458	Lamin B1	other
R53942	cDNA clone 40026 similar to ADP,ATP carrier protein, heart/skeletal muscle isoform	other
T96666	cDNA clone 121357 similar to Cyclin-dependent kinase interactor 1	cell-cycle
R44863	cDNA clone 33477 similar to Phenylalkylamine binding protein	other
D43772	GRB-7	signal transduction
X67334	BM28	DNA replication
T78606	cDNA clone 113492 similar to Translational activator GCN1	translational mach.
D42047	KIAA0089 Human mRNA gene for Mouse glycerophosphate dehydrogenase-related	metabolic enz.
X58072	hGATA3	transcription factor
M34344	Platelet glycoprotein IIb	cell ad./cell-cell comm.
R46731	cDNA clone 36517 similar to Transcriptional regulatory protein RPD3	transcriptional mach.
U33819	Zinc-finger DNA binding protein	transcription factor
R23246	cDNA clone 131094 similar to Goliath protein	other
H64489	cDNA clone 238846 similar to Leukocyte antigen CD3	cell ad./cell-cell comm.
T47377	cDNA clone 571035 similar to S-100P protein	other

FIG. 11C: 5564-600

14/23

FIG. 11D

H05814	cDna clone 44151 similar to Putative ATP-dependent RNA helicase	translational mach.
X83618	3-hydroxy-3-methylglutaryl coenzyme A synthase	metabolic enz.
U14550	Sialyltransferase SThM	metabolic enz.
R55185	cDNA clone 154654 similar to Galactoside 3(4)-L-fucosyltransferase	metabolic enz.
V00568	C-myc	transcription factor
L47738	Inducible protien	other
M20560	Lipocortin-III	other
T47964	cDNA clone 71549 similar to Purine nucleoside phosphorylase	metabolic enz.
T90192	cDna clone 110564 similar to DNA-binding protein MEL-18	transcription factor
U20285	GPS1	signal transduction
M81637	Grancalcin	other
H19201	cDna clone 508873 similar to Guanine nucleotide diss. stim.	signal transduction
X03635	Oestrogen receptor	transcription factor
X52426	Cytokeratin 13	structural/cytoskeletal
R37799	cDNA clone 270833 similar to Protein phosphatase PP2A	signal transduction
X03484	Raf oncogene	signal transduction
L11284	ERK activator kinase, MEK1	signal transduction
X70683	SOX-4	transcription factor
R72644	cDNA clone 156489 3' similar to Choline kinase	other
M97370	Adenosine receptor (A2)	signal transduction
X76180	Lung amiloride sensitive Na+ channel protein	cell ad./cell-cell comm.
R45583	cDNA clone 35271 similar to NG-CAM related cell adhesion molecule	cell ad./cell-cell comm.
M13665	C-myb	transcription factor
D26018	Human mRNA (KIAA0039) for ORF	other
H54752	cDna clone 203275 similar to Activator 1 37 KD subunit	other
H04239	cDna clone 151776 similar to Developmental protein seven in absentia	signal transduction

15/23

FIG. 11E

D21852	Human mRNA (KIAA0029) for ORF	other
M57730	Immediate early response protein B61 precursor	secre. gr. fact.
M16768	Human T-cell receptor gamma chain VJCI-CII-CIII region	other
X13956	12S RNA induced by poly(rI), poly(rC) and Newcastle disease virus	other
U07349	Human B lymphocyte serine/threonine protein kinase	signal transduction
D00726	Ferrochelatase	metabolic enz.
M54968	K-ras oncogene	signal transduction
D31661	ERK tyrosine kinase	signal transduction
U21108	Human dual specific protein phosphatase	signal transduction
X52228	Secreted epithelial tumour mucin antigen	other
X13425	Pancreatic carcinoma marker GA733-1	other
R52511	cDNA clone 39763 similar to Gamma-interferon-inducible protein IP-30 precursor	other
X83425	Lutheran blood group glycoprotein.	cell ad./cell-cell comm.
U13045	Human nuclear respiratory factor-2 subunit beta 1	transcription factor
M20132	Androgen receptor	transcription factor
L07615	Neuropeptide Y receptor Y1	signal transduction
M86699	Human kinase, TTK	signal transduction
R43936	cDNA clone 32974 similar to Serine/threonine-protein kinase STE20	signal transduction
X60787	Transcription factor ILF	transcription factor
X74570	Gal-beta(1-3/1-4)GlcNAc alpha-2,3-sialyltransferase	metabolic enz.
U30255	Pphosphogluconate dehydrogenase	metabolic enz.
D11466	For Pig N-acetylglucosaminyl-phosphatidylinositol	other
M64347	Novel growth factor receptor	signal transduction
R43064	cDNA clone 32719 similar to E2 protein	transcription/replication
M60724	p70 ribosomal S6 kinase alpha-1	translational mach.
U34074	A kinase anchor protein S-AKAP84	mitochondrial
H87205	cDNA clone 220505 similar to cell division protein kinase 5	cell-cycle
X57348	cDNA clone 9112 similar to H.sapiens mRNA	other
X07696	Keratin, type I cytoskeletal 15	structural/cytoskeletal
X13482	U2 small nuclear ribonucleoprotein A'	translational mach.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

16/23

FIG. 11F

FIG. 11F

Nominal copy number: 1-10 copies/cell	
D63879	Human mRNA for ORF (KIAA0196)
M90656	Gamma-glutamylcysteine synthetase (GCS)
H13822	cDNA clone 148291 similar to Zinc finger autosomal protein
X83928	Transcription factor TFIIID subunit TAFII28
H52655	cDNA clone 235891 similar to DNA polymerase beta
R42095	Tyrosine kinase SEK receptor precursor
D13633	Human mRNA for ORF (KIAA0008)
U13616	Human ankyrin G
M74558	SIL mRNA
X63468	Transcription factor TFIIIE alpha
M30704	Amphiregulin
U11700	Copper transporting ATPase
H78807	cDNA clone 230127 similar to D-beta-hydroxybutyrate dehydrogenase precursor
M58411	p80-coilin
U25975	Serine kinase, hPAK65
R42898	cDNA clone 32410 similar to JNK activating kinase 1
J03258	Vitamin D3 receptor
	other
	metabolic enz.
	other
	transcriptional mach.
	DNA replication
	signal transduction
	other
	other
	other
	transcriptional mach.
	other
	metabolic enz.
	metabolic enz.
	translational mach.
	signal transduction
	signal transduction
	signal transduction

17/23

FIG. 11GAccession

Genes transcriptionally repressed in BT-474 vs HT-125	
<u>Nominal copy number: 500-1,000 copies/cell</u>	<u>Functional category</u>
H41129	cell ad./cell-cell comm.
T51261	protein process.
R91912	other
M77349	other
M35878	other
T92451	structural/cytoskeletal
M95787	structural/cytoskeletal
J03210	ECM
L16895	cell ad./cell-cell comm.
X57351	other
T99774	cell ad./cell-cell comm.
J03464	ECM
T61333	protein process.
X78947	secr. gr. fact.
R49855	other
T54767	cell ad./cell-cell comm.
L01131	cell ad./cell-cell comm.
L16510	protein process.
H87343	protein process.
M69066	structural/cytoskeletal
X91911	other
T95046	protein process.
X15882	structural/cytoskeletal
M69054	other
X55740	metabolic enz.
H80342	structural/cytoskeletal
U21090	DNA replication
Z18951	signal transduction
<u>Nominal copy number: 100-500 copies/cell</u>	
Placental calcium-binding protein	
Transforming growth factor-beta induced gene product	
Clone HL 1006d similar to IGFBP3	
cDNA clone 118219 similar to Tropomyosin	
Smooth muscle protein 22-alpha	
Collagenase type IV mRNA, 3' end.	
Human lysyl oxidase	
Interferon-inducible protein 1-8D	
cDNA clone 122884 similar to Follistatin precursor	
Clone pHcol2A1 similar to Procollagen alpha 2(I)chain precursor	
cDNA clone 78034 similar to Metalloproteinase inhibitor 3 precursor	
Connective tissue growth factor	
cDNA clone 152637 similar to Coagulation factor V precursor	
cDNA clone 73802 similar to Sparc precursor	
Human decorin	
Cathepsin B	
cDNA clone 252394 similar to Protein-lysine 6-oxidase precursor	
Moesin	
RTVP-1	
cDNA clone 120085 similar to Protease do precursor	
Collagen VI alpha-2 C-terminal globular domain.	
IGFBP6	
Placental cDNA coding for 5' nucleotidase	
cDNA clone 241122 similar to Tubulin beta chain	
DNA polymerase delta	
Caveolin-1	

FIG. 11G

18/23

FIG. 11H

	<u>Nominal copy number: 50-100 copies/cell</u>	
U39050	Human mitogen-responsive phosphoprotein	other
H62466	cDNA clone 209654 similar to Collagen alpha 3(VI) chain	structural/cytoskeletal
X14787	Thrombospondin	cell ad./cell-cell comm.
H45474	cDNA clone 183508 similar to Peripheral myelin protein 22	signal transduction
H29761	cDNA clone 186308 similar to Annexin I	cell ad./cell-cell comm.
M11718	Alpha-2 type V collagen	structural/cytoskeletal
X12369	Tropomyosin alpha chain, smooth muscle	structural/cytoskeletal
T54317	cDNA clone 69040 similar to RAS-related protein	signal transduction
U20280	Cathepsin X	protein process.
H23235	cDNA clone 52096 similar to APDGR precursor	signal transduction
R67072	cDNA clone 140763 similar to GAP junction alpha-1 protein	cell ad./cell-cell comm.
R72104	cDNA clone 155771 similar to Bone morphogenetic protein 1 precursor	protein process.
U21128	Lumican	ECM

19/23

FIG. 111

M23419	Initiation factor 5A	translational mach.
L34056	Cadherin-11	signal transduction
M64110	Caldesmon	structural/cytoskeletal
X72012	Endoglin	signal transduction
R70383	cDNA clone 155241 similar to Vitellogenin II precursor	other
T69425	cDNA clone 82963 similar to Alpha-2 macroglobulin precursor	other
H02540	cDNA clone 151270 similar to Cathepsin L precursor	protein process.
X05232	Stromelysin	protein process.
T54278	cDNA clone 69199 similar to Tissue inhibitor of metalloproteinases II precursor	protein process.
M24486	Prolyl 4-hydroxylase alpha subunit	ECM
H80975	cDNA clone 240954 similar to Plasma protease C1 inhibitor precursor	protein process.
H06706	cDNA clone 44616 similar to RAS-related protein ORAB-1	signal transduction
M33210	Colony stimulating factor 1 receptor	signal transduction
T96364	cDNA clone 121066 similar to M-phase inducer phosphatase 3	metabolic enz.

FIG. 111

20/23

FIG. 11J

Nominal copy number: 10-50 copies/cell	
J02814	Chondroitin sulfate proteoglycan core protein
D14874	Adrenomedullin
L35594	Autotaxin
R23249	cDNA clone 131100 similar to Preprotein translocase secy subunit
L13923	Fibrillin
T91563	cDNA clone 118372 similar to CD44 antigen, epithelial form precursor
J05017	Aldose reductase
M55210	(LAMB 2) gene Laminin B2 chain
M13755	Interferon-induced 17 KD protein
U32114	Caveolin-2
X17097	PSG9
X52679	Sphingomyelin phosphodiesterase
Z48481	Membrane-type matrix metalloproteinase 1
U24389	Lysyl oxidase-like protein
M85289	Heparan sulfate proteoglycan
D29992	Placental protein 5
Y00711	L-lactate dehydrogenase H chain
R50499	Fibrinogen beta chain precursor
U09278	Fibroblast activation protein
H15811	cDNA clone 159533 similar to Platelet membrane glycoprotein IIb precursor
X82494	Fibulin-2
H37925	cDNA clone 190993 similar to Interferon-activatable protein 204
J02685	Plasminogen activator inhibitor-2
U03106	Wild-type p53 activated fragment-1, p21WAF1/CIP1
D13665	Osteoblast specific factor 2
T55741	cDNA clone 73645 similar to Myosin light chain kinase
U18467	Pregnancy-specific beta 1-glycoprotein 7
X06700	Pro-alpha1 (III) collagen
H56627	cDNA clone 231424 similar to Glutathione S-transferase P
T41199	cDNA clone 62328 similar to Laminin gamma-1 chain precursor
T59895	cDNA clone 76290 similar to Ubiquitin carboxyl-terminal hydrolase isozyme L1
T68426	CD81 antigen
X13810	OTF-2
T50086	cDNA clone 70213 similar to Alpha-1-antitrypsinase F precursor
	cell ad./cell-cell comm.
	other
	cell ad./cell-cell comm.
	other
	ECM
	signal transduction
	other
	ECM
	other
	signal transduction
	other
	protein process.
	protein process.
	cell ad./cell-cell comm.
	cell ad./cell-cell comm.
	other
	other
	cell ad./cell-cell comm.
	signal transduction
	cell ad./cell-cell comm.
	ECM
	other
	protein process
	cell-cycle
	cell ad./cell-cell comm.
	cell ad./cell-cell comm.
	other
	ECM
	other
	ECM
	other
	cell ad./cell-cell comm.
	transcription factor.
	protein process.

SUBSTITUTE SHEET (RULE 26)

21/23

FIG. 11K

D28137	Human mRNA for BST-2	cell ad./cell-cell comm.
Z37976	Latent TGF-beta binding protein	other
X02492	Interferon-induced protein 6-16 precursor	other
T66960	cDNA clone 66508 3' similar to Nuclear factor 1 clone PNF1/X	other
H88938	Keratinocyte growth factor precursor	secre. gr. fact.
M29150	Interleukin 6	secre. gr. fact.
X05231	Collagenase	protein process.
X68148	p66shc	signal transduction
D31762	KIAA0057 for ORF	cell-cycle
T61090	cDNA clone 83635 similar to Endoglin precursor	signal transduction
T53889	cDNA clone 78017 similar to Complement C1R component precursor	other
X58288	hR-PTPu gene for protein tyrosine phosphatase	signal transduction
T51913	cDNA clone 72466 similar to Alpha crystallin B chain	other
X17042	Hematopoietic proteoglycan core protein	cell ad./cell-cell comm.
M55621	N-acetylglucosaminyltransferase I	protein process.
H85111	cDNA clone 220183 similar to EBNA-2 nuclear protein	transcription factor
X63613	Pentaxin	other
M24594	Interferon-induced 56 KD protein	other
R36467	cDNA clone 136821 similar to Transforming growth factor beta 1 precursor	secre. gr. fact.
M87503	Transcriptional regulator ISGF3 gamma subunit	transcription factor
X13097	Tissue type plasminogen activator	cell ad./cell-cell comm.
X60201	Brain-derived neurotrophic factor	other
M63509	Human glutathione transferase M2	other
M92642	Alpha-1 type XVI collagen	ECM
M80469	MHC class I HLA-J	other

22/23

FIG. 11L

T60855	cDNA clone 76721 similar to Calcineurin B subunit isoform 1	signal transduction
X16707	Fra-1	transcription factor
H54425	cDNA 203126 similar to Metallothionein-II	other
L04733	Kinesin light chain	structural/cytoskeletal
R46493	cDNA clone 36200 similar to Tissue factor precursor	ECM
M29696	Interleukin-7 receptor alpha chain precursor	signal transduction
T97948	cDNA clone 121916 similar to Calponin H2, smooth muscle	structural/cytoskeletal
R43953	cDNA clone 33191 similar to Opioid binding protein	cell ad./cell-cell comm.
R16659	cDNA clone 129622 similar to Tissue factor pathway inhibitor	cell ad./cell-cell comm.
U37019	Smooth muscle cell calponin	structural/cytoskeletal
M96322	Gravin	cell ad./cell-cell comm.
T78624	cDNA clone 113518 similar to Carbonyl reductase	other
M60974	GADD45	cell-cycle
X60708	pcHDP7	protein process.
M62424	Thrombin receptor precursor	signal transduction
R94513	cDNA clone 197667 similar to STAT2	signal transduction
V00523	HLA-DR alpha	other
H65605	cDNA clone 209780 similar to Prothrombin precursor	signal transduction
X76488	Lysosomal acid lipase	protein process.
R12676	cDNA clone 129303 similar to Complement factor H-like protein 1 precursor	other
X06985	Heme oxygenase	metabolic enz.
R60908	cDNA clone 42188 similar to protein-tyrosine kinase	signal transduction
U25779	Human chromosome 17q21 mRNA clone 694:2	other
X12496	Erythrocyte membrane sialoglycoprotein beta	other
T71207	cDNA clone 110162 similar to RAS-related C3 Botulinum toxin substrate 2	signal transduction

SUBSTITUTE SHEET (RULE 26)

23/23

FIG. 11M

R52961	cDNA clone 40303 similar to Shc transforming protein 46.8 KD and 51.7 KD precursor	signal transduction
M97676	Homeobox protein	transcription factor
R95874	cDNA clone 199264 similar to LTR5 Retrovirus-related ENV polyprotein	other
T86469	cDNA 114641 similar to Collagen alpha 3(VI) chain	ECM
R48243	cDNA clone 153769 similar to RAS-related protein RHA1	signal transduction
U19969	Two-handed zinc finger protein ZEB	transcription factor
<u>Nominal copy number: 1-10 copies/cell</u>		
R99935	cDNA clone 201757 similar to DNA-directed RNA pol I largest subunit	transcription mach.
T64142	cDNA clone 80145 similar to Proteolipid protein PPA1	protein process.
H74007	cDNA clone 232946 similar to Serine/threonine-protein kinase SGK	signal transduction
H47650	PTS system, sucrose-spec. IIABC component	other
J04080	Complement component C1r	other
D90226	OSF-1	secre. gr. fact.
X03348	Human mRNA for beta-glucocorticoid receptor	signal transduction
R32804	cDNA clone 135146 similar to Glucose transporter type 3	other
M60618	Nuclear autoantigen SP-100	other
L13463	Human helix-loop-helix basic phosphoprotein	other
M26683	Human interferon gamma treatment inducible mRNA.	other
M63838	Interferon-gamma induced protein	other
X73608	Testican	cell ad./cell-cell comm.
M88338	Serum protein MSE55	other
T52698	cDNA clone 67233 similar to Protein-tyrosine phosphatase 1B	protein process.
U16307	Glioma pathogenesis-related protein	other
R35976	cDNA clone 137079 similar to CD30 ligand	signal transduction
X16665	HOX2H	transcription factor
R42244	cDNA clone 30543 similar to Antigen peptide transporter 1	protein process
U19718	Human microfibril-associated glycoprotein	ECM
T85165	cDNA clone 111345 similar to SRC substrate P80/85 proteins	signal transduction
R45687	Cyclin G	cell-cycle
L22473	Bax	cell-cycle

Message quantities are expressed as nominal copy number per cell relative to hybridization intensities of known copy number spiked controls.

Abbreviations: secr. gr. fact., secreted growth factor; ad., adhesion; comm., communication; mach., machinery; enz., enzyme; process., processing; ECM, extracellular matrix.